#include<stdio.h>

int main()

{

int arr[20],i,n,k;

printf("Enter total elements: ");

scanf("%d",&n);

printf("Enter elements: ");

for(i=0;i<n;i++)

{

scanf("%d",&arr[i]);

}

printf("Original Array: ");

for(i=0;i<n;i++)

{

printf("%d ",arr[i]);

}

printf("\n");

for (i=1;i<n;i++)

{

int key=arr[i];

int j=i-1;

while(j>=0 && arr[j]>key)

{

arr[j + 1] = arr[j];

j = j - 1;

}

arr[j + 1] = key;

printf("Iteration %d: ", i);

for(k=0;k<n;k++)

{

printf("%d ", arr[k]);

}

printf("\n");

if (i == 5)

{

printf("Result after 6th Iteration: ");

for (k = 0; k < n; k++)

{

printf("%d ", arr[k]);

}

printf("\n");

break;

}

}

return 0;

}